



CITY OF LA PALMA
COMMUNITY SERVICES DEPARTMENT

2015 WATER QUALITY REPORT

DATA FOR 2014

Your 2015 Water Quality Report

Since 1990, California public water utilities have been providing an annual Water Quality Report to their customers. **This year's report covers calendar year 2014 drinking water quality testing and reporting.**

Your City of La Palma Community Services Department (City) vigilantly safeguards its water supply and, as in years past, the water delivered to your home meets the quality standards required by federal and state regulatory agencies. The U.S. Environmental Protection Agency (USEPA) and the State Water Resources Control Board, Division of Drinking Water (DDW) are the agencies responsible for establishing and enforcing drinking water quality standards.

In some cases, the City goes beyond what is required by testing for unregulated chemicals that may have known health risks but do not have

drinking water standards. For example, the Orange County Water District (OCWD), which manages the groundwater basin, test for unregulated chemicals in our water supply. Unregulated chemical monitoring helps USEPA and DDW determine where certain chemicals occur and whether new standards need to be established for those chemicals to protect public health.

Through drinking water quality testing programs carried out by OCWD for groundwater and the City for the water distribution system, your drinking water is constantly monitored from source to tap for regulated and unregulated constituents.

The State allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently.

Some of our data, though representative, are more than one year old.



The Quality of Your Water is Our Primary Concern

Sources of Supply

Orange County's water supplies include groundwater managed by the Orange County Water District (OCWD). Groundwater comes from a natural underground aquifer that is replenished with water from the Santa Ana River, local rainfall and imported water. The groundwater basin is 350 square miles and lies beneath north and central Orange County from Irvine to the Los Angeles County border and from Yorba Linda to the Pacific Ocean. More than 20 cities and retail water districts draw from the basin to provide water to homes and businesses.

Orange County's Water Future

For years, Orange County has enjoyed an abundant, seemingly endless supply of high-quality water. However, as water demand continues to increase statewide, we must be even more conscientious about our water supply and maximize the efficient use of this precious natural resource.

OCWD and the Municipal Water District of Orange County work cooperatively to evaluate new and innovative water management and supply development programs, including water reuse and recycling, wetlands expansion, recharge facility construction, ocean and brackish water desalination, surface storage and water use efficiency programs. These efforts are helping to enhance long-term countywide water reliability and water quality.

A healthy water future for Orange County rests on finding and developing new water supplies, as well as protecting and improving the quality of the water that we have today. Your local and regional water agencies are committed to making the necessary investments today in new water management projects to ensure an abundant and high-quality water supply for our future.

Basic Information About Drinking Water Contaminants

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs and wells. As water travels over the surface of land or through the layers of the ground it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animal and human activity.

Contaminants that may be present in source water include:

- **Microbial contaminants**, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.
- **Radioactive contaminants**, which can be naturally occurring or be the result of oil and gas production or mining activities.
- **Inorganic contaminants**, such as salts and metals, which can be naturally occurring or result from urban storm runoff, industrial or domestic wastewater discharges, oil and gas production, mining and farming.
- **Pesticides and herbicides**, which may come from a variety of sources such as agriculture, urban stormwater runoff and residential uses.
- **Organic chemical contaminants**, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gasoline stations, urban stormwater runoff, agricultural application and septic systems.

In order to ensure that tap water is safe to drink, USEPA and the DDW prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. DDW regulations also establish limits for contaminants in bottled



Save water in the garden by utilizing drip irrigation.



Rotating Sprinkler Nozzles can save water in an existing system.

water that must provide the same protection for public health. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk.

More information about contaminants and potential health effects can be obtained by calling the USEPA's Safe Drinking Water Hotline at (800) 426-4791.

About Lead in Tap Water

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children.

Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The City is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components.

When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking.

If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or on the internet at: www.epa.gov/safewater/lead.

Conservation Tips for Inside Your Home

Collect water used to wash fruits and vegetables

Use it to water your houseplants

Don't run water to thaw food:

Defrost in the refrigerator

Wash only full loads of laundry and dishes:

Saves up to 50 gallons per week

Install aerators on the kitchen faucet

Reduce flow to less than 1 gallon per minute

Plug the sink instead of running water to rinse your razor

Saves up to 300 gallons a month

Buy water-saving devices like high-efficiency toilets and clothes washers. You'll save gallons of water per day, and many of these items are eligible for rebates. To learn more, visit:

www.ocwatersmart.com

Talk to your family and friends about saving water. If everyone does a little, we all benefit a lot.



Questions about your water? Contact us for answers.

For information about this report, or your water quality in general, please contact the Community Services Department at (714) 690-3310.

The City Council meets on the 1st and 3rd Tuesday of every month at 7:00 p.m. in the City Council Chambers located at 7822 Walker Street, La Palma, CA 90623. Please feel free to participate in these meetings.

For more information about the health effects of the listed contaminants in the following tables, call the USEPA hotline at (800) 426-4791.

Important Information the EPA Would Like You to Know

Issues in Water Quality that Could Affect Your Health

Immuno-Compromised People

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised people, such as those with cancer who are undergoing chemotherapy, persons who have had organ transplants, people with HIV/AIDS or other immune system disorders, some elderly persons and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers.

Disinfectants and Disinfection Byproducts

Disinfection of drinking water was one of the major public health advances in the 20th century. Disinfection was a major factor in reducing waterborne disease epidemics caused by pathogenic bacteria and viruses, and it remains an essential part of drinking water treatment today.

Chlorine disinfection has almost completely eliminated from our lives the risks of microbial waterborne diseases. Chlorine is added to your drinking water at the source of supply (groundwater well). Enough chlorine is added so that it does not

completely dissipate through the distribution system pipes. This “residual” chlorine helps to prevent the growth of bacteria in the pipes that carry drinking water from the source into your home.

However, chlorine can react with naturally-occurring materials in the water to form unintended chemical byproducts, called disinfection byproducts (DBPs), which may pose health risks. A major challenge is how to balance the risks from microbial pathogens and DBPs. It is important to provide protection from these microbial pathogens while simultaneously ensuring decreasing health risks from disinfection byproducts. The Safe Drinking Water Act requires the USEPA to develop rules to achieve these goals.

Trihalomethanes (THMs) and Haloacetic Acids (HAAs) are the most common and most studied DBPs found in drinking water treated with chlorine. In 1979, the USEPA set the maximum amount of total THMs allowed in drinking water at 100 parts per billion as an annual running average. Effective in January 2002, the



What are Water Quality Standards?

Drinking water standards established by USEPA and DDW set limits for substances that may affect consumer health or aesthetic qualities of drinking water. The chart in this report shows the following types of water quality standards:

- **Maximum Contaminant Level (MCL):** The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to the PHGs (or MCLGs) as is economically and technologically feasible.
- **Maximum Residual Disinfectant Level (MRDL):** The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.
- **Secondary MCLs:** Set to protect the odor, taste, and appearance of drinking water.
- **Primary Drinking Water Standard:** MCLs for contaminants that affect health along with their monitoring and reporting requirements and water treatment requirements.
- **Regulatory Action Level (AL):** The concentration of a contaminant, which, if exceeded, triggers treatment or other requirements that a water system must follow.

How are Contaminants Measured?

Water is sampled and tested throughout the year. Contaminants are measured in:

- parts per million (ppm) or milligrams per liter (mg/L)
- parts per billion (ppb) or micrograms per liter (µg/L)
- parts per trillion (ppt) or nanograms per liter (ng/L)

What is a Water Quality Goal?

In addition to mandatory water quality standards, USEPA and DDW have set voluntary water quality goals for some contaminants. Water quality goals are often set at such low levels that they are not achievable in practice and are not directly measurable. Nevertheless, these goals provide useful guideposts and direction for water management practices. The chart in this report includes three types of water quality goals:

- **Maximum Contaminant Level Goal (MCLG):** The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by USEPA.
- **Maximum Residual Disinfectant Level Goal (MRDLG):** The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.
- **Public Health Goal (PHG):** The level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by the California Environmental Protection Agency.

2014 City of La Palma Drinking Water Quality Local Groundwater

Chemical	MCL	PHG (MCLG)	Avg. Local Amount	Range of Detections	MCL Violation?	Typical Source of Contaminant
Radiologicals – Tested in 2014						
Uranium (pCi/L)	20	0.43	<1	ND – 1.3	No	Erosion of Natural Deposits
Inorganic Chemicals – Tested in 2014						
Arsenic (ppb)	10	0.004	7.8	6.1 – 12	No	Erosion of Natural Deposits
Fluoride (ppm) – naturally-occurring	2	1	0.42	0.39 – 0.45	No	Erosion of Natural Deposits
Secondary Standards* – Tested in 2014						
Chloride (ppm)	500*	n/a	17	14 – 19	No	Runoff or Leaching from Natural Deposits
Manganese (ppb)	50*	n/a	53	43 – 58	No	Erosion of Natural Deposits
Odor (odor units)	3*	n/a	1.3	ND – 2	No	Naturally-occurring Organic Materials
Specific Conductance (µmho/cm)	1,600*	n/a	490	470 – 510	No	Substances that form Ions in Water
Sulfate (ppm)	500*	n/a	52	45 – 58	No	Runoff or Leaching from Natural Deposits
Total Dissolved Solids (ppm)	1,000*	n/a	300	280 – 310	No	Runoff or Leaching from Natural Deposits
Turbidity (NTU)	5*	n/a	0.15	0.1 – 0.2	No	Runoff or Leaching from Natural Deposits
Unregulated Chemicals – Tested in 2014						
Alkalinity, total (ppm as CaCO ₃)	Not Regulated	n/a	180	180	n/a	Runoff or Leaching from Natural Deposits
Boron (ppm)	NL = 1	n/a	<0.1	ND – 0.1	n/a	Runoff or Leaching from Natural Deposits
Calcium (ppm)	Not Regulated	n/a	44	43 – 44	n/a	Runoff or Leaching from Natural Deposits
Hardness, total (ppm)	Not Regulated	n/a	150	140 – 150	n/a	Runoff or Leaching from Natural Deposits
Hardness, total (grains/gal)	Not Regulated	n/a	8.8	8.2 – 8.8	n/a	Runoff or Leaching from Natural Deposits
Magnesium (ppm)	Not Regulated	n/a	9.3	8.6 – 10	n/a	Runoff or Leaching from Natural Deposits
pH (pH units)	Not Regulated	n/a	8.1	8.1	n/a	Hydrogen Ion Concentration
Potassium (ppm)	Not Regulated	n/a	2.1	2 – 2.2	n/a	Runoff or Leaching from Natural Deposits
Sodium (ppm)	Not Regulated	n/a	49	47 – 51	n/a	Runoff or Leaching from Natural Deposits

ppb = parts-per-billion; ppm = parts-per-million; pCi/L = picoCuries per liter; NTU = nephelometric turbidity units; µmho/cm = micromhos per centimeter; ND = not detected; < = average is less than the detection limit for reporting purposes; MCL = Maximum Contaminant Level; (MCLG) = federal MCL Goal; PHG = California Public Health Goal; NL = Notification Level; n/a = not applicable *Contaminant is regulated by a secondary standard.

Unregulated Chemicals Requiring Monitoring

Chemical	Notification Level	PHG	Average Local Groundwater	Range of Detections	Most Recent Sampling Date
Chlorate (ppb)	800	n/a	120	64 – 170	2013
Molybdenum, Total (ppb)	n/a	n/a	16	13 – 19	2013
Strontium, Total (ppb)	n/a	n/a	530	490 – 580	2013
Vanadium, Total (ppb)	50	n/a	<0.2	ND – 0.3	2013

Stage 1 Disinfectants / Disinfection Byproducts Rule lowered the total THM maximum annual average level to 80 parts per billion and added HAAs to the list of regulated chemicals in drinking water. Your drinking water complies with the Stage 1 Disinfectants / Disinfection Byproducts Rule.

Stage 2 of the regulation was finalized by USEPA in 2006, which further controls allowable levels of DBPs in drinking water without compromising disinfection itself. A required distribution system evaluation was completed in 2008 and a Stage 2 monitoring plan has been approved by DDW. Full Stage 2 compliance began in 2012.

Arsenic Advisory

While your drinking water meets the federal and state standard for arsenic of 10 micrograms per liter, it does contain low levels of arsenic. The arsenic standard balances the current understanding of arsenic’s possible health effects against the cost of removing arsenic from drinking water. The USEPA continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems. Additional information on arsenic is available from the EPA website, www.epa.gov/safewater/arsenic.

2014 City of La Palma Distribution System Water Quality					
Disinfection Byproducts	MCL (MRDL/MRDLG)	Average Amount	Range of Detections	MCL Violation?	Typical Source of Contaminant
Total Trihalomethanes (ppb)	80	24	4.8 – 12	No	Byproducts of Chlorine Disinfection
Haloacetic Acids (ppb)	60	9	ND – 1.7	No	Byproducts of Chlorine Disinfection
Chlorine Residual (ppm)	(4 / 4)	0.99	0.04- 1.5	No	Disinfectant Added for Treatment
Aesthetic Quality					
Color (color units)	15*	0.5	ND – 5	No	Erosion of Natural Deposits
Odor (threshold odor number)	3*	1	1 – 2	No	Erosion of Natural Deposits
Turbidity (NTU)	5*	1.5	0.2 – 2.7	No	Erosion of Natural Deposits

Eight locations in the distribution system are tested quarterly for total trihalomethanes and haloacetic acids; twenty locations are tested monthly for color, odor and turbidity.
MRDL = Maximum Residual Disinfectant Level; MRDLG = Maximum Residual Disinfectant Level Goal
*Contaminant is regulated by a secondary standard to maintain aesthetic qualities (taste, odor, color).

Lead and Copper Action Levels at Residential Taps						
	Action Level (AL)	Health Goal	90 th Percentile Value	Sites Exceeding AL / Number of Sites	AL Violation?	Typical Source of Contaminant
Lead (ppb)	15	0.2	ND	1 / 30	No	Corrosion of Household Plumbing
Copper (ppm)	1.3	0.3	0.21	0 / 30	No	Corrosion of Household Plumbing

Every three years, 30 residences are tested for lead and copper at-the-tap. The most recent samples were collected in 2012. Lead was detected in 2 homes; one exceeded the regulatory Action Level. Copper was detected in 22 homes; none exceeded the AL. A regulatory AL is the concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

Unregulated Chemicals Requiring Monitoring in the Distribution System					
Chemical	Notification Level	PHG	Average Amount	Range of Detections	Most Recent Sampling Dates
Chlorate (ppb)	800	n/a	140	93 – 170	2013
Chromium, Hexavalent (ppb)**	MCL = 10	0.02	< 0.03	ND – 0.05	2013
Molybdenum, Total (ppb)	n/a	n/a	12	6.8 – 14	2013
Strontium, Total (ppb)	n/a	n/a	600	490 – 900	2013
Vanadium, Total (ppb)	50	n/a	0.53	ND – 1.8	2013

**Hexavalent chromium is regulated with an MCL of 10 ppb but was not detected, based on the detection limit for purposes of reporting of 1 ppb. Hexavalent chromium was included as part of the unregulated chemicals requiring monitoring.

Useful Water Conservation Tips for Outside Your Home

- Check your sprinkler system for leaks, overspray and broken sprinkler heads and repair promptly
Saves up to 500 gallons per month
 - Install a smart sprinkler controller that adjusts watering based on weather, soil type, amount of shade and plant type
Saves up to 40 gallons per day/over 13,000 gallons per year
 - Use a broom instead of a hose to clean drives and sidewalks
Saves up to 150 gallons each time
 - Water your plants in the early morning or evening to reduce evaporation and ineffective watering due to wind
Saves up to 25 gallons each time
 - Remove the Turf from Your Yard
Saves about 42 gallons per square foot/per year
- Additional water saving steps and devices are also available, and some of these are eligible for substantial rebates. Consider replacing your lawn with drought tolerant plants, synthetic turf, or permeable hardscape. Or add rotating sprinkler nozzles, a weather-based controller, or a drip line to enhance your automated irrigation system. And mulch. Hundreds of gallons a year can be saved by simply using organic mulch around plants to reduce evaporation.
- For complete rebate information for these water saving resources, visit: www.ocwatersmart.com.



Source Water Assessments Groundwater Assessment

An assessment of the drinking water sources for the City was completed in December 2002. The groundwater sources are considered most vulnerable to the following activities not associated with detected contaminants: drinking water treatment plants, high density housing, motor pools, repair shops, storm drain discharge points, utility stations — maintenance areas, and water supply wells.

A copy of the complete assessment is available at State Water Resources Control Board, Division of Drinking Water, 605 W. Santa Ana Boulevard, Building 28, Room 325, Santa Ana, California 92701.

You may request a summary of the assessment by contacting the City at (714) 690-3310.

Want Additional Information?

There’s a wealth of information on the internet about Drinking Water Quality and water issues in general, especially the drought and conservation. Some good sites to begin your own research are:

- City of La Palma:**
www.CityofLaPalma.org
- Municipal Water District of Orange County:**
www.mwdoc.org
- U.S. Environmental Protection Agency:**
www.epa.gov/safewater
- California Department of Water Resources:**
www.water.ca.gov
- Metropolitan Water District of Southern California:**
www.mwdh2o.com
- Drought and Water Conservation Tips:**
www.BeWaterWise.com
www.SaveOurWater.com
- Rebate Information, Water Saving Resources:**
www.OCWaterSmart.com



The California State Water Project

The State Water Project, one of the largest water systems in the world, collects water from rivers in Northern California and transports it, through a network of canals, pipelines and tunnels, over many hundreds of miles to Southern California, where it's distributed throughout the region. Along the way, it's lifted almost 3,800 feet, with the highest single lift of 1,926 feet over the Tehachapi Mountains, which separate the San Joaquin Valley from Southern California. To view a short YouTube video that shows the length and complexity of the State Water Project, [click here](#).

The Colorado Aqueduct

Imported water from the Colorado River travels over 240 miles to get to Orange County. Along the way, it is lifted over 1,600 feet by a series of five pumping plants. Shown here, the Gene Pumping Station near the Colorado River boosts the water over 300 feet. From there, it flows through a series of canals, pipes, tunnels and siphons, across the Mojave Desert and beneath the San Jacinto Mountains, on its way to meet the needs of the people of Southern California. To view a short YouTube video on the construction and history of the Colorado Aqueduct, [click here](#).



The Need to Conserve — — Has Never Been Greater

As California enters its fourth year of drought, water conservation has become vitally important for us all. There are many areas in and around our homes where we can save water, particularly outdoors, where our gardens and lawns receive almost 60% of all the water we use. To learn more about the drought, or to find useful tips for how to conserve water, click the logos to visit:

bewaterwise.com®

or



To learn about programs and devices that can help save water, along with information on rebates for these water saving resources, visit:

www.OCWaterSmart.com

To view a short YouTube video on multiple ways to conserve water, [click here](#).

Conservation Tips for Inside Your Home . . .



Collect water used to wash fruits and vegetables:

Use it to water your houseplants

Don't run water to thaw food:

Defrost in the refrigerator

Install aerators on kitchen and bathroom faucets:

Reduces flow to less than 1 gallon per minute



Turn off the water while you brush your teeth:

Saves up to 2.5 gallons per minute

Spend only 5 minutes in the shower:

Saves up to 8 gallons each time

Install low-flow shower heads:

Saves 2.5 gallons per shower

Plug the sink instead of running water to rinse your razor:

Saves up to 300 gallons a month



. . . and More Tips for Outside Your Home

Check your sprinkler system for leaks, overspray and broken sprinkler heads and repair promptly:

Saves up to 500 gallons per month

Use a broom instead of a hose:

Saves up to 150 gallons each time

Water your plants in the early morning or evening:

Saves up to 25 gallons each time

Remove the turf from your yard:

Saves about 42 gallons per square foot/per year

Rain barrels: **Saves about 600 gallons per year**

Rotating nozzles for pop-up spray heads:

Uses 20% less water than conventional sprinkler heads

Additional water saving steps and devices are also available, and some of these are eligible for substantial rebates. Consider replacing your lawn with drought tolerant plants, synthetic turf, or permeable hardscape. Add rotating sprinkler nozzles, or a drip line to enhance your automated irrigation system. Adding organic mulch saves hundreds of gallons of water each year.

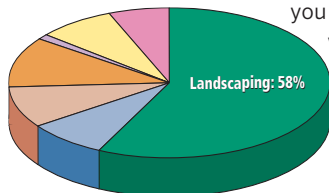
For complete rebate information for these water saving resources, visit:

www.ocwatersmart.com.

**Talk to your family and friends about saving water.
If everyone does a little, we all benefit a lot.**

How Residential Water is Used in Orange County

Outdoor watering of lawns and gardens makes up approximately 60% of home water use. By cutting your outdoor watering by 1 or 2 days a week, you can dramatically reduce your overall water use.



● Showers & Baths: 8% ● Dishwashers: 1%
● Clothes Washers: 9% ● Leaks: 7%
● Toilets: 11% ● Faucets: 6%

Data is representative of average consumption; your water usage may vary.

This report contains important information about your drinking water. Translate it, or speak with someone who understands it.

يحتوي هذا التقرير على معلومات هامة عن نوعية ماء الشرب في منطقتك. يرجى ترجمته، أو ابحث التقرير مع صديق لك يفهم هذه المعلومات جيداً.

Arabic

이 보고서에는 귀하가 거주하는 지역의 수질에 관한 중요한 정보가 들어 있습니다. 이것을 번역하거나 충분히 이해하시는 친구와 상의하십시오.

Korean

这份报告中有些重要的信息，讲到关于您所在社区的水的品质。请您找人翻译一下，或者请能看得懂这份报告的朋友给您解释一下。

Chinese

Este informe contiene información muy importante sobre su agua potable. Para mas información ó traducción, favor de contactar a Customer Service Representative. Telefono: (714) 690-3310.

Spanish

この資料には、あなたの飲料水についての大切な情報が書かれています。内容をよく理解するために、日本語に翻訳して読むか説明を受けてください。

Japanese

Bản báo cáo có ghi những chi tiết quan trọng về phẩm chất nước trong cộng đồng quý vị. Hãy nhờ người thông dịch, hoặc hỏi một người bạn biết rõ về vấn đề này.

Vietnamese